WHAT IS CLAIMED IS:

1. A method for forming a gate electrode of a semiconductor device, the method comprising the steps:

i) forming a gate oxide film, a doped-silicon film, a tungsten nitride film, a tungsten film, and a hard mask film sequentially on a semiconductor substrate;

ii) patterning the hard mask film;

iii) etching the tungsten film and the tungsten nitride film using the patterned hard mask film as an etching barrier in order to expose the doped-silicon film;

iv) implanting predetermined oxidation-accelerating ions into a portion of the exposed doped-silicon film;

v) etching the exposed doped-silicon film; and

vi) re-oxidizing the substrate resulting object to form a re-oxidation film at a side of the etched doped-silicon film.

2. A method as claimed in claim 1, wherein the predetermined oxidation-accelerating ion includes Ge.

3. A method as claimed in claim 1, wherein step iv) is performed by an energy between 20 to 200 KeV.

4. A method as claimed in claim 1, wherein the ion implantation in step iv) has a projecting range of ± 500Å of a thickness of the exposed doped-silicon film portion.

5. A method as claimed in claim 1, wherein an ion implantation angle of the ion implantation in step iv) has a range of 0 to 10°.

6. A method as claimed in claim 1, wherein step v) is performed at a temperature less than or equal to 1000°C.